technology, as well as the ability to develop it.

While the current adminsitration has demonstrated its commitment to fund a missile defense and support the deployment of a ground-based defense, and has withdrawn from the ABM Treaty, it has yet to support a design to build an effective defense, much less insist on technological leadership.

America's current plans include a virtual technological regression in any planning for a space-based interceptor defense, unwilling or unable to use past technology developed for Brilliant Pebbles.

Unwilling or unable to use Brilliant Pebbles technology for space-based interceptors, the current administration and the Congress have been unwilling or unable to employ technological advances that have occurred in:

The increasing use of robotics, including autonomous operation and data fusing and joint decision making between independently operating robots, which NASA has developed for missions on Mars.

The development and increasing use of photonic or fiber optics for sensors, communications, and computer processing, which provide a means to defend against electromagnetic pulse.

The development of three-dimensional computer chips, allowing for the integration of different processes, whether computer processing communications, processing of sensor data, and active response within the same chip.

These advances in photonics and computer chips, combined with continuing advances in nanotechnology, including Micro Electro Mechanical Systems or MEMS, could potentially allow for the development of kinetic kill vehicles smaller than Brilliant Pebbles, which were essentially based on late 1980's technology.

Instead of building kinetic kill vehicles that weigh in the tens of kilograms, the United States could potentially be building kinetic kill vehicles that weigh under a kilogram, perhaps in the tens of grams, approaching the theoretical limits for kinetic kill vehicles suggested by Lowell Wood at Lawrence Livermore when he proposed the idea of Genius Sand as an advance generation Brilliant Pebble.

America's defense planners seem to have a striking aversion to the development of advanced technology systems, especially those taking advantage of deployment in space, as seen not only in its termination of the Space Based Laser, but its very low level of funding for the development of a system of space-based relay mirrors that could utilize a high-energy laser to strike at targets around the world.

This system of relay mirrors, suggested in the Strategic Defense Initiative as a way to take advantage of high energy laser technology that was ground-based or air-based, is being funded at a level of around $1 million when it should be funded at the billion-dollar level.

The state of U.S. technological leadership is also seen by Pentagon planning to deploy a system of optical communication satellites, in other words, satellites using laser communications, which would provide much needed bandwidth and high security. These had been proposed in the early 1980's and the Air Force had performed some early demonstrations.

More than twenty years after this exciting concept was proposed, the Pentagon is finally planning to spend hundreds of millions of dollars to develop a satellite laser communications system. This comes after the European Union successfully demonstrated the use of laser communications with its Artemis satellite.

I was asked to speak about what it will take for us to build the effective defenses we need. Good leadership is the answer.

Three key ingredients to good leadership include not only the will to build a defense, but an intelligent design and technological leadership.

Over the past three years, our country has clearly demonstrated its will to build a missile defense; I strongly suggest to you that we still need an intelligent design and technological leadership to build an effective defense.

HONORING ANDREW TOTI

HON. DENNIS A. CARDOZA

OF CALIFORNIA

IN THE HOUSE OF REPRESENTATIVES

Tuesday, February 10, 2004

Mr. CARDOZA. Mr. Speaker, I rise today to honor a great American inventor from Modesto, California, Mr. Andrew Toti. Mr. Toti has invented a number of household items, and has over 200 United States and foreign patents to his credit. He is a perfect example of the ''can-do'' attitude that Americans possess. His ingenuity has created the vertical blinds which many of us have in our office windows, to a device that helped save lives in World War II.

In a 1995 interview with Parade magazine, Mr. Toti stated that the most important element to successful inventing is defining a need for a new product or identifying a problem, then finding an elegant solution. Mr. Toti has been finding solutions to problems, and inventing new products almost his entire life. He credits his parents for nurturing and supporting his craft, and giving him advice on how to become a success.

At the young age of twelve, Mr. Toti created a new kind of combination lock, however it was not marketed very well. He learned quickly from this mistake. Mr. Toti has always been able to admit to mistakes, and this is one of his greatest qualities. When Mr. Toti was sixteen, he had built a boat with a very powerful motor. His mother was worried he would drown, so he began making a life vest using duck and goose feathers. He noticed that these vests were a bit bulky, so began filling them with compressed air. The War Department was told of his invention, and paid Mr. Toti $1500 for the rights. This life saving device soon became the Mae West life vest. This is the same life vest that President George H.W. Bush was wearing when he was shot down over the Pacific Ocean. Without this life preserver, President Bush might not have survived his ordeal in the ocean.

As you know Mr. Speaker, the San Joaquin Central Valley is a lush agricultural area, and our farmers grow anything from peaches to wine grapes, and raise cattle and poultry. Mr. Toti's ingenuity has helped two major industries in the area. First, in 1951, Mr. Toti patented his feather-plucking machine. This machine uses thousands of rubber ''fingers'' to remove the feathers of poultry. Twenty-one years later, he assisted in designing a grape-harvesting machine for Ernest and Julio Gallo, two of the most prominent viticulturalists in the nation. Recently, Mr. Toti developed an endotracheal tube, which aids physicians with rapid intubation of the trachea in situations where the tube needs to bend due to anatomical variations in the body.

I ask all of my colleagues today to help me recognize and thank Mr. Toti for his contributions to our nation. It is my honor to represent such a fine constituent in the House of Representatives.

HONORING THE ACHIEVEMENTS OF VIOLET BROSART

HON. JACK QUINN

OF NEW YORK

IN THE HOUSE OF REPRESENTATIVES

Tuesday, February 10, 2004

Mr. QUINN. Mr. Speaker. I am honored to rise today to officially recognize and pay tribute to Violet Brosart, an outstanding community leader.

Violet Brosart is a resident of Lackawanna, New York and is currently serving as the President of the American Legion Auxiliary, Department of New York. The American Legion Auxiliary is the largest women's patriotic service organization in the world. Its primary goals are to serve veterans and their families, to promote patriotism and Americanism, and to serve our children and communities.

President Brosart is a 36 year member of Hamburg Unit #527 in Erie County. She has served as its president and remains an active member. She has also been active in her community, becoming involved in Boy Scouts, Campfire Girls, Youth Baseball, the Empire State Ballet Company, and the Hamburg Little Theater. She also worked for 10 years as a child day care provider. Mrs. Brosart is the mother of four and grandmother of ten. She also has one great grandchild.

Each year the Department President chooses a project of particular interest to her and raises money for that cause. This year President Brosart has chosen the Alzheimer's Association as her special project. More than 14 million Americans will be diagnosed with Alzheimer's Disease within the next 50 years unless a cure or prevention is found. Alzheimer's disease affects not just the patient, but the family as well. Often children and grandchildren find themselves becoming the caregivers to those who once gave care to them. Money raised for this special project will be distributed to all seven areas of the Alzheimer's Coalition in New York State, based on need. The money will be used to support programs in the following areas: early diagnosis, effective treatment, essential support networks, and caregiver training. In addition to these areas of concern the Alzheimer's Coalition is working in conjunction with the VA facilities to aid veterans that have Alzheimer's. By embracing this project, President Brosart and the American Legion Auxiliary can ''Help for Today'' and ''Hope for Tomorrow:'' To date, over $151,500 has been raised, with a goal of $40,000 by August 1, 2004.

Traveling throughout the 62 Counties in New York State, President Brosart emphasizes the American Legion Auxiliary's strong commitment to our country and to our veterans. Her patriotic spirit is evident in all of her speeches and presentations. The members of the American Legion Auxiliary, Department of New York are very proud of President Brosart and her deep commitment to the veterans of our nation.